Twirlygig

Build a liftoff spinner toy powered by your own breath.

Kit contains:

- spinner template
- wooden skewer
- long straw
- short straw piece
- 2 mini rubber bands
- poster putty
- wooden bead

You will need: scissors, a hole punch or sharp pencil, a ruler, a pin, and coloring supplies (optional).

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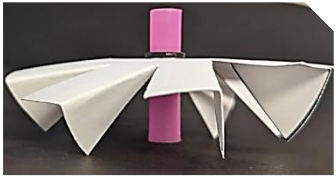
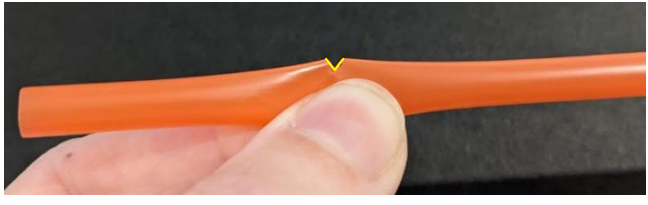
INSTRUCTIONS

Step 1. Make your spinner! Color the template if desired. Cut along the solid lines. Fold along the dashed lines. Punch a hole through the center star.



Step 2. Slide your spinner onto the short piece of straw. Put a mini rubber band above and below the spinner to keep it in place.

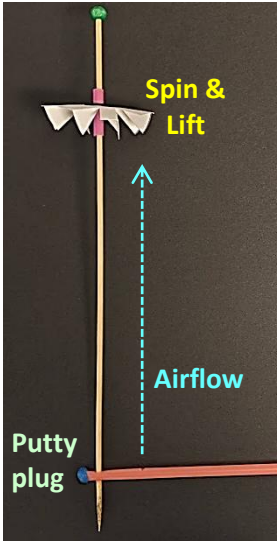
Step 3. Pinch the long straw at the black indicator mark. Cut a tiny V-shaped notch.



Tip: If you goof up, just cut the end off the straw and try again.

Step 4. Measure 1 inch from the notch toward the end of the straw. Poke a pin all the way through the straw, aligned with the notch.

Step 5. Stick the skewer through the pinhole. (Note that the notch is up and the skewer point is down.) Plug up the end of the straw with poster putty.

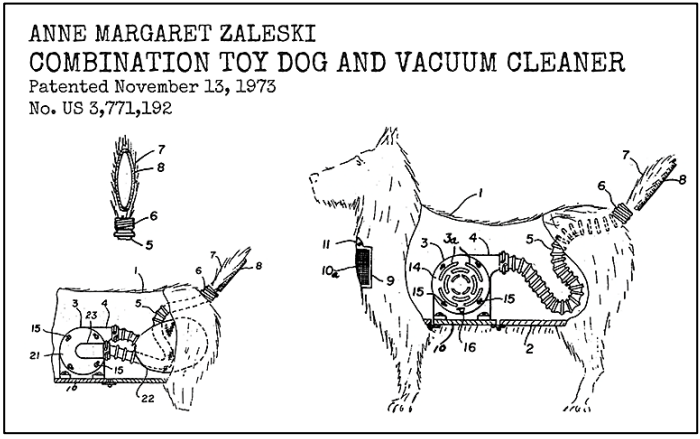


Step 6. Slide the spinner onto the straw, flaps down. Put the bead on the top of the skewer.

Activate: Blow into the end of your twirlygig straw. The air will come out of the notch and push the flaps on your spinner, causing it to spin and generate vertical thrust. Result: Liftoff!

RIDICULOUS INVENTIONS

Lots of inventors apply for, and receive, patents for their inventions. A **patent** is a government document that declares that an invention is brand new, useful, and officially created or discovered by a particular inventor. However, many patents are granted for ridiculously silly things. For example:



The World Intellectual Property Organization (WIPO), an agency of the United Nations, makes lists of weird and wonderful patents. Check out their 2018 list for a good laugh:

www.wipo.int/en/web/patents/2018_patent_picks